GOVERNMENT OF INDIA
AGRICULTURE AND FARMERS WELFARE
LOK SABHA

UNSTARRED QUESTION NO:880
ANSWERED ON:07.02.2017
Vertical Farming
Kambhampati Dr. Hari Babu

Will the Minister of AGRICULTURE AND FARMERS WELFARE be pleased to state:

(a) whether Indian Council of Agricultural Research (ICAR) has conducted any study on the feasibility of vertical farming in urban areas of the country;

(b) if so, the details thereof;

(c) whether the Government has proposed to promote vertical farming in cities/urban areas through various schemes and incentives to increase the production of horticultural produce;

(d) if so, the details thereof; and

(e) the steps taken by the Government in this regard?

Answer

MINISTER OF STATE IN THE MINISTRY OF AGRICULTURE AND FARMERS WELFARE
(SHRI SUDARSHAN BHAGAT)

(a) Yes, Madam. An exploratory study by ICAR-IIHR, Bengaluru was carried out using strawberry as a candidate crop.

(b) The exploratory study using strawberry was found to be feasible to go upto 4 tiers using vanilla pots without affecting the yield and quality of the strawberry. A yield of 250g may be harvested per plant in a cropping cycle. The vertical farming method can accommodate 4 x more plants per unit area. However, vertical farming in India is yet to take off. To add to this, terrace gardening and roof top gardening are being carried out by some agencies on contract basis in metropolitan cities.

Moreover, technology for mushroom production has been standardized by ICAR-DMR, Solan which is also a part of vertical farming. Such technology is being tried by entrepreneurs in Haryana and Punjab and also in Manipur. Besides this, preliminary research on production of commercial flowers through vertical approach is in progress by ICAR-DFR, Pune.

(c) Vertical farming has the potential to increase the production of horticultural produce. Some studies carried out have shown prospects of vertical farming in the country by utilizing the city waste and recycled water for the purpose.

(d) Reply is given in part (c) and (e).

(e) In 2015, under the aegis of the Indian Council of Agricultural Research, New Delhi, an International conference on vertical farming was organized by the Vertical Farming Association (India), Mumbai; Association for Vertical Farming, Munich, Germany and Society for Promotion of Horticulture, ICAR-IIHR, Bengaluru on 2nd and 3rd November, 2015. Several national and international experts participated in the seminar. This event has served as a curtain raiser for introduction of vertical farming with suitable modifications to suit the Indian context.

****